



CLEAR VISION CALCULATIONS

From page 746 of AASHTO—Geometric Design of Highways and Streets

$$d = 1.47 \sqrt{V^3(j+t_z)}$$

Where:

- d = sight distance (ft)
- V = design speed of roadway (mph)
- j = sum of perception time and vehicle actuation time (sec)
- t_z = time required to accelerate and traverse distance "S" determined below (sec)

$$S = D+W+L$$

Where:

- D = distance from edge of pavement to front of stopped vehicle (ft)
- W = pavement width along path of crossing vehicle (ft)
- L = overall length of vehicle (ft)

With the distance "S" calculated, t_z may be determined from Figure IX-33 located on page 748 of AASHTO. It is determined with graphical methods from the "P" curve of this graph. This curve represents a typical passenger vehicle.

Assumptions:

- The controlling case will be the traffic crossing maneuver (left turn).
- J = 2.0 sec
- L = 19 ft
- D = 10 ft

CLEAR VISION CALCULATIONS							
CASE	STOPPING LANE WIDTH	ACCELERATING LANE WIDTH	TURN DIRECTION	W (MPH)	S (ft)	t _a (sec)	d (ft)
1	12'	12'	RIGHT	30	12	4.1	0.265
	12'	12'	LEFT	30	24	5.3	4.5
2	12'	11'	RIGHT	30	22	5.1	4.5
	12'	11'	LEFT	30	58	8.7	6.0
3	12'	11'	RIGHT	40	22	5.1	4.5
	12'	11'	LEFT	40	44	7.3	4.2
4	12'	11'	RIGHT	40	22	5.1	4.5
	12'	11'	LEFT	40	44	7.3	5.3

YARD REQUIREMENTS:	FRONT	REAR	SIDE	SIDE STREET
1. POD C	50'	50'	10'	—
2. POD L & E	30'	25'	5'	10'
3. POD K	20'	20'	0', 5'	—
4. ALL OTHER PODs	20'	20'	5'	10'

SINGLE FAMILY RESIDENTIAL													MISC				TOTAL	
TABLE B AREA COMPUTATIONS																		
	POD A	POD B	POD C	POD D	POD E	POD F	POD G	POD H	POD I	POD J	POD K	POD L	TOWN H	STREET	REC	CEC	OTHER	
TOTAL AREA (AC)	47.772	34.327	75.791	13.757	37.975	19.176	38.861	23.339	22.002	39.810	23.908	40.602	4.547	17.137	4.349	49.422		492.776
DRIVEWAY (AC)*		1.26	0.91	0.47	0.51	0.63	1.50	0.60	0.72	1.05	0.60	0.82	0.24	-	-	-	-	9.63
TOTAL STR. COVER (AC)**	7.55	5.56	2.81	2.81	3.03	3.80	8.98	3.58	4.63	6.28	3.58	3.75	0.76	1.20	-	-	-	76.23
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEN SPACE AREA (AC)	31.35	23.48	66.23	6.40	30.22	11.17	22.24	15.46	13.42	26.71	14.39	31.07	2.85	0.00	2.19	49.42		348.71
OPEN SPACE RATIO	65.68	68.43	87.43	61.13	79.63	58.23	57.23	66.23	61.03	67.13	60.23	76.03	62.73	0.03	50.33	100.03		70.83

* DRIVEWAYS = 20'x20' = 400 SQ. FT. PER RESIDENTIAL LOT
** TOTAL STRUCTURAL COVER = 60'x40' = 2400 SQ. FT. PER RESIDENTIAL LOT

TABLE C													
DENSITY TABLE													
	POD A	POD B	POD C	POD D	POD E	POD F	POD G	POD H	POD I	POD J	POD K	POD L	TOTAL
AREA OF POD (AC)	47.772	34.327	75.791	13.757	37.975	19.176	38.861	23.339	22.002	39.810	23.908	40.602	417.320
DWELLING UNITS (EA)	<u>137</u>	<u>101</u>	<u>51</u>	<u>51</u>	<u>55</u>	<u>69</u>	<u>163</u>	<u>85</u>	<u>84</u>	<u>114</u>	<u>65</u>	<u>68</u>	<u>1023</u>
DENSITY (UNITS/ACRE)	2.9	2.9	0.7	3.7	1.5	3.6	4.2	2.8	3.8	2.9	2.7	1.7	2.45

GATE #1 DETAIL		GATE #4 DETAIL	
# OF GATES	2	# OF GATES	2
TYPE OF GATE	SLIDING	TYPE OF GATE	SWINGING
MAX. CAPACITY CARS/HR. /LANE	300	MAX. CAPACITY CARS/HR.	4C
MANNED/MECHANICAL	MANNED	MANNED/MECHANICAL	MECHANICAL
TURN AROUND RADIUS	21'	TURN AROUND RADIUS	21'
# OF LANES INTO UNIT	2	# OF LANES INTO UNIT	1
LANE WIDTH	11'	LANE WIDTH	14'
CARS/LANE	12	CARS/LANE	8.

GATE #2 DETAIL		GATE #5 DETAIL	
# OF GATES	2	# OF GATES	2
TYPE OF GATE	SLIDING	TYPE OF GATE	SWINGING
MAX. CAPACITY CARS/HR.	300	MAX. CAPACITY CARS/HR.	40
MANNED/MECHANICAL	MANNED	MANNED/MECHANICAL	MANNED
TURN AROUND RADIUS	21'	TURN AROUND RADIUS	16'
# OF LANES INTO UNIT	1	# OF LANES INTO UNIT	1
LANE WIDTH	11'	LANE WIDTH	14'
# CARS/LANE	12	# CARS/LANE	6

GATE #3 DETAIL	
# OF GATES	2
TYPE OF GATE	SWINGING
MAX. CAPACITY CARS/HR.	40
MANNED/MECHANICAL	MECHANICAL
TURN AROUND RADIUS	21'
# OF LANES INTO UNIT	1
LANE WIDTH	14'
# CARS/LANE	4

APPROVED BY THE CITY OF SAN ANTONIO PLANNING COMMISSION:

ERZD

[illegible]

REVISED PUD PLAN #98-027D
FOR
THE HEIGHTS AT STONE OAK

PUD PLAN #98-027D
REVISED
PUD PLAN
SHEET 01 OF 01



A memo from the
CITY of SAN ANTONIO
Planning Department
Master Development

TO: Jeffrey Mc Kinnie

DATE: June 12, 2002

FROM: Michael O. Herrera, Senior Planner

COPIES TO: File

SUBJECT: # 98-027 D

Name: The Heights at Stone Oak

The plat or plan referenced above was heard by the ☒ Planning Commission

☐ Director of Planning COSA

on the date shown.

The following action was taken:

☒ APPROVED
☐ DISAPPROVED

A plat will not be recorded pending site improvements, the required guarantee is posted or payment of impact fees are paid (or filed).

If you have any questions regarding please call Mr. Michael O. Herrera @ 207-7038